ABSTRACT OF THE DISCLOSURE

An organic/inorganic hybrid film represented by $SiC_xH_yO_z$ ($x>0$, $y\geqq 0$, $z>0$) is plasma-etched with an etching gas containing fluorine, carbon and nitrogen. During the etching, a carbon component is eliminated from the surface portion of the organic/inorganic hybrid film due to the existence of the nitrogen in the etching gas, to thereby reform the surface portion. The reformed surface portion is nicely plasma-etched with the etching gas containing fluorine and carbon.